



**Diebold Election Systems, Inc.**  
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February 21, 2006

Mr. Bruce McDannold  
Interim Director  
Office of Voting Systems Technology Assessment  
California Secretary of State  
1500 11th Street  
Sacramento, California 95814

Dear Bruce:

Diebold Elections System, Inc. (DESI) is in receipt of your letter from February 17, 2006 and report, "Security Analysis of the Diebold AccuBasic Interpreter" conducted by the Voting Systems Technology Assessment Advisory Board (VSTAAB) and researchers from University of California, Berkeley.

DESI's development team has reviewed the thorough security analysis and conducted an assessment of the necessary changes to the AccuVote Optical Scan firmware and BallotStation software to correct the report's findings.

We have concluded that the following can be included immediately to the AccuVote Optical Scan firmware (tentatively version 1.96.7).

- Interpreter changes. Implement all of the short term changes recommended by the VSTAAB security analysis.
- Verify AccuBasic Digital Signature. Implement verification of AccuBasic Digital Signature and print the signature along with the report.
- Internal consistency checks on counters. This provides internal consistency checks on the race, candidate and ballot counters to ensure all the counters are consistent and there is no 'rollover' of counters.

The last two points were not mentioned in the security analysis. However, DESI believes that adding this functionality would provide for additional security to the memory card.

In addition, we will make the following changes to BallotStation software (tentatively version 4.6.5):

- Interpreter changes. Implement all of the short term changes recommended by the VSTAAB security analysis.
- Verify AccuBasic Digital Signature. Implement verification of AccuBasic Digital Signature and print the signature along with the report.

We are including for the same reasons as the Optical Scan firmware, the AccuBasic Digital Signature for the AccuVote-TSX memory card even though it was not raised in the security analysis.

We intend to submit all of these changes by the end of this week to the Independent Testing Authority (ITA) for their federal review. We will also forward the same files to your office for the VSTAAB to re-examine.

The above mentioned changes address the first three items listed in your letter that your office is requiring DESI to correct.

As part of contemplating the AccuBasic changes to the various voting system components, we have internally discussed changes to include removing the interpreters and interpreted code. The alterations to the source code to accommodate this would be more complex and would include changes to the GEMS server software in addition to the Optical Scan firmware and BallotStation software. Based on the necessary software coding, quality assurance and quality control testing, and internal operational testing of all the voting systems affected, we could submit this software and firmware package to the ITA for federal review by the end of the this year.

If you believe that a conference call between the VSTAAB and DESI developers to review the changes we plan to submit this week would be beneficial, please let me know.

Sincerely,

A handwritten signature in black ink, appearing to read "Dan B. L.", written in a cursive style.

President  
Diebold Election Systems, Inc.

CC: Bill Wood, Undersecretary of State